

Office de la Propriété Intellectuelle du Canada

Un organisme d'Industrie Canada Canadian Intellectual Property Office

An agency of Industry Canada CA 2189431 C 2001/10/23

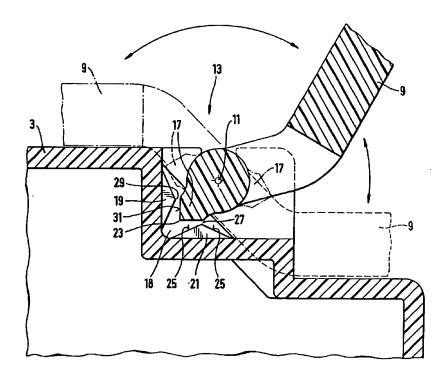
(11)(21) 2 189 431

(12) BREVET CANADIEN **CANADIAN PATENT** 

(13) C

- (86) Date de dépôt PCT/PCT Filing Date: 1995/05/03
- (87) Date publication PCT/PCT Publication Date: 1995/11/16
- (45) Date de délivrance/Issue Date: 2001/10/23
- (85) Entrée phase nationale/National Entry: 1996/11/01
- (86) N° demande PCT/PCT Application No.: US 95/04959
- (87) N° publication PCT/PCT Publication No.: WO 95/30593
- (30) Priorité/Priority: 1994/05/04 (94107012.0) EP

- (51) CI.Int. 6/Int. CI. 6 B65D 43/24, A61K 31/535, B65D 6/02, C07D 498/04, C07D 265/34
- (72) Inventeurs/Inventors: Frank, Martin Werner, DE; Bitowft, Bruce Kevin, DE
- (73) Propriétaire/Owner: THE PROCTER & GAMBLE COMPANY, US
- (74) Agent: SIM & MCBURNEY
- (54) Titre: BOITE A LINGETTES HUMIDES POSSEDANT UN PANNEAU DE COUVERTURE POURVU DE **CHARNIERES**
- (54) Title: WET-WIPE CONTAINER HAVING A HINGED COVER



(57) Abrégé/Abstract:

The invention is a container (1) for a stack of moist wipes (7). It comprises a body (5) and a lid (3) covering the body. A dispensing aperture (15) in the lid (3) is covered by a hinging cover (9). Retaining means (13) are provided for keeping the cover (9) in a first opened position in which the cover is pivoted around its hinging axis by less than 180 degrees, preferably less than 135 degrees, upon exertion of a predetermined force. The retaining means prevent the cover from falling or bouncing back into its closed position after having been opened. The retaining means are configured such that the cover is further hingeable from its first open position to a second open position by exertion of a second predetermined force on the lid. This prevents the container from toppling over when too large a force is exerted on the lid, or the lid is accidentally broken off the container.







## WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



### INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT

ONDER THE PATENT COOPERATION TREATY (PCT)			
(51) International Patent Classification 6:	Al	(11) International Publication Number	THO OFFICE
B65D 43/24		() Rumber I appression Rumber	WO 95/30593
		(43) International Publication Date:	16 November 1995 (16.11.95)

(21) International Application Number: PCT/US95/04959

(22) International Filing Date: 3 May 1995 (03,05,95)

(30) Priority Data: 94107012.0 4 May 1994 (04.05.94)

EP (34) Countries for which the regional or international application was filed: BE et al.

(71) Applicant (for all designated States except US): THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US).

(72) Inventors; and
(75) Inventors/Applicants (for US only): BITOWFT, Bruce, Kevin [US/DE]; Im Hirschgarten 23, D-61479 Glashutten (DE). FRANK, Martin, Wemer [DE/DE]; Meriamplatz 10, D-6000 [ORD-10.00] 60316 Frankfurt (DE).

(74) Agents: REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, ÖH 45217 (US).

(81) Designated States: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, JP, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TT, UA, US, UZ, VN, OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD, SZ, UG).

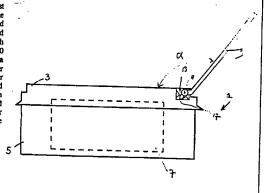
Published
With international search report.

2189431

(54) Title: WET-WIPE CONTAINER HAVING A HINGED COVER

(57) Abstract

The invention is a container (1) for a stack of moist wipes (7). It comprises a body (5) and a lid (3) covering the body. A dispensing aperture (15) in the lid (3) is covered by a hinging cover (9). Retaining means (13) are provided for keeping the cover (9) in a first opened position in which the cover is pivoted around its hinging axis by less than 180 degrees, preferably less than 183 degrees, upon exertion of a prodetermined force. The retaining means prevent the cover from falling or bouncing back into its closed position after having been opened. The retaining means are configured such that the cover is further hingeable from its first open position to a second open position by exertion of a second position to a second open position by exertion of a second predetermined force on the lid. This prevents the container from toppling over when too large a force is exerted on the lid, or the lid is accidentally broken off the container.



\* (Referred to in PCT Gazette No. 44/1996, Section II)

## 2189431

1

WET-WIPE CONTAINER HAVING A HINGED COVER

#### FIELD OF THE INVENTION

The invention relates to a container for containing a stack of moist wipes, the container comprising a container body and a lid covering the container body, the lid comprising a dispensing aperture and a hinging cover connected to the lid and overlying the dispensing aperture, wherein the hinging cover is pivotable around a hinging axis.

#### BACKGROUND OF THE INVENTION

Such a container is known from GB-A- 1 476 303. In this patent application a container is described which consists of an upper part and a lower part, which parts can be separated for introducing a fresh stack of wet wipes into the container. The upper part comprises a slit-like dispensing aperture which is covered by a hinging lid.

SUBSTITUTE SHEET (RULE 26)

2 AS

The known container has as a disadvantage that the lid upon opening protrudes beyond the perimeter of the container. Hence the container needs to be placed on a support on which sufficient clearance is provided to open the lid.

Containers in which the hinging of the lid is limited to a predetermined maximum by means of abutting of the lid against a stopping surface, are known in art. These containers often have the disadvantage that upon accidentally exerting an excess force on the cover, the container can topple over, or the cover can break off the container.

It is an object of the present invention to provide a container for wet wipes which can easily be opened while using one hand.

It is a further object of the invention to provide a container for wet wipes which upon opening takes up relatively little space.

It is again a further object of the invention to provide a container for wet wipes which does not easily topple over once the cover is opened, and in which the cover does not break off upon exertion of a relatively large force on the cover.

It is another object of the invention to provide a container for wet wipes that remains in an opened position by itself. WO 95/30593

3

### SUMMARY OF THE INVENTION

The container in accordance with the invention is characterised in that the container further comprises retention means for keeping the cover in a first opened position in which the cover is pivoted around the hinging axis by less than 1800, preferably less than 135 0, upon exertion of a predetermined force on the cover, the cover being further hingeable around the hinging axis from its first open position to a second open position by exertion of a second predetermined force on the lid.

Once the cover is opened, it is locked in position by the retention means such that is does not fall or bounce back to its closed position and it does not hinge further towards a position in which the cover is parallel to the lid of the container and substantially protrudes beyond the perimeter of the container. Upon exertion of an excessive force on the cover, the cover is released from the retention means and hinges further around the hinging axis.

The possibility of further opening of the lid beyond the position that is determined by the retention means, will prevent the container from toppling over when accidentally an excess force is exerted on the cover. Also is accidental breaking off of the cover from the lid prevented. Preferably the force for opening the cover is between 1 and 50N and the force for hinging the container beyond its first open position is higher than 1 N, preferably higher than 5N and most preferably higher than 10 N.

In an embodiment of the container according to the invention, the retention means comprises a first protrusion provided on the cover, the first protrusion being located near the hinging axis, and a second protrusion provided on the lid, the first protrusion upon opening of the cover being rotatingly engageable with the second protrusion to prevent further opening of the cover.

Upon opening of the cover, the protrusions engage and form a stop to further movement of the cover around the hinging axis. Preferably a further protrusion is provided which forms a resistance against closing of the cover, once it has been opened.

10

The protrusions may each comprise a sliding surface which terminates in an edge. In this case the edge of the protrusion on the cover slides upon opening over the sliding surface of the protrusions on the lid. The cover is placed in its opened position by sliding the edge of the protrusion on the cover across the sliding surface of the first protrusion on the lid, past the sharp of the first protrusion. The cover can be moved beyond its first open position by sliding the edge of the protrusion on the cover across the sliding surface of the second protrusion on the lid that forms a stop against further opening, past the edge of the second protrusion.

Alternatively, the protrusions on the lid comprise a single member having a recession, the protrusion on the hinging cover may be slightly rounded to engage with the member on the lid upon rotation of the cover.

It is an object of an aspect of the invention to provide a container for containing a stack of moist wipes, the container comprising:

a container body and a lid covering the container body, the lid comprising a dispensing aperture ad a hinging cover connected to the lid and overlying the dispensing aperture, wherein the hinging cover is pivotable around a hinging axis, 4a

wherein the container further comprises retention means for keeping the cover in a first opened position in which the cover is pivoted around the hinging axis by less than 180°, upon exertion of a predetermined force on the cover, the cover being further hingeable around the hinging axis from its first open position to a second open position by exertion of a second predetermined force on the cover.

#### 10 BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be explained in detail with reference to the accompanying drawings. In the drawings:

15 Figure 1 shows a top view of the container according to the invention,

5

Figure 2 shows a side view of a container according to the invention,

Figure 3 shows an enlarged side view of the retention means of the container of figures 1 and 2, and Figures 4, 5 and 6 show enlarged side views of alternative embodiments of the retention means.

## DETAILED DESCRIPTION OF THE INVENTION

Figures 1 and 2 show a container 1 comprising a lid 3 and a container body 5. The lid 3 can be removed from the container body to insert a stack of moist wipes 7 into the container. The lid 3 is for instance connected to the container body by means of a hinge or can be clamped onto the container body 5. The lid 3 covers the container body 5 in a liquid tight manner, such that drying out of the contents of the container is prevented.

A cover 9 is hingingly connected to the lid 3 and can hinge around a hinging axis 11. As can be seen in figure 1, the lid 3 comprises a dispensing aperture 15 through which the wipes can be removed from the container 1. The dispensing aperture 15 is sealingly covered by the cover 9.

As can be seen from figure 3, the retention means 13 comprise a protrusion 17 on the cover 9 and two protrusions 19 and 21 on the lid 3. The protrusion 17 on the cover 9 comprises a relatively sharp edge 23 that upon opening of the cover 9 from its closed position, slides across surface 25 of the protrusion 21. When the edge 23 slides past the sharp edge 27 of the protrusion 21, the cover 9 is in its first open position. The protrusion 17 on the cover 9 is caught in a recess 18 between the protrusions 19 and 21 on the lid 3 and is maintained in its opened position, the cover 9 being prevented from further opening by the protrusion

3431 .{\<sup>\\\\</sup>6

19. In its opened position, the cover 9 is hinged around the hinging axis 11 by an angle alpha which can vary between 75° and 135°.

Upon exertion of a larger force on the cover 9, the sharp edge 29 engages the surface 31 of the protrusion 17. When the edge 23 of the protrusion 17 slides past the edge 29 of the protrusion 19, the cover is completely flipped back and is put in its second open position. The cover 9 can be closed from its first open position or can be moved beyond its first open position by exertion of a force of about 1 to 50 N on the cover 9. By allowing the cover 9 to completely flip open, it can be prevented that the container 1 topples over when too large a force is accidentally exerted on the cover 9. Furthermore, it is prevented that the cover 9 breaks away from the lid 3 when forced backwards.

Figure 4 shows an embodiment wherein the retention means comprises a single piece of material 20 on the cover 3 wich single piece of material comprises a recession 18 and which engages with the protrusion 17 on the cover 9.

Figure 5 shows an embodiment in which the cover 9 is provided with a stopping surface 35, which upon opening of the cover engages the protrusion 41. The orientation of the stopping surface 35 determines the extent by which the cover 9 can be opened. It has been found that for easy, one-handed access to the wipes in the container, the lid 9 should be opened at an angle alpha between 75° and 135° with respect to the lid 3.

Figure 6 shows an embodiment in which the cover 9 is provided with two protrusions 37,39 which engage a protrusion 41 on the lid 3.

THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

1. A container for containing a stack of moist wipes, the container comprising:

a container body and a lid covering the container body, the lid comprising a dispensing aperture ad a hinging cover connected to the lid and overlying the dispensing aperture, wherein the hinging cover is pivotable around a hinging axis,

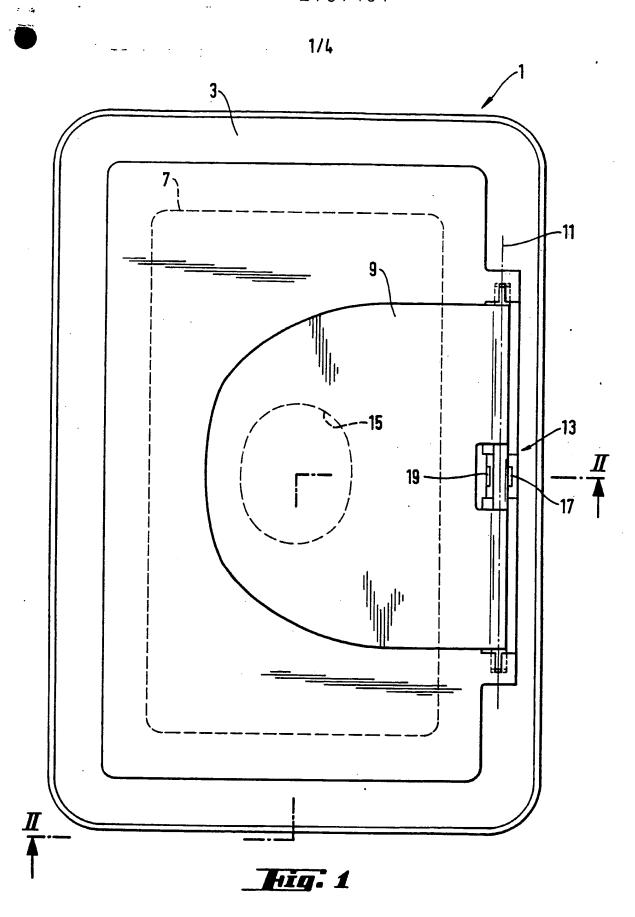
wherein the container further comprises retention means for keeping the cover in a first opened position in which the cover is pivoted around the hinging axis by less than 180°, upon exertion of a predetermined force on the cover, the cover being further hingeable around the hinging axis from its first open position to a second open position by exertion of a second predetermined force on the cover.

- 2. A container according to claim 1, wherein said cover is pivoted around the hinging axis by less than 135°.
- 3. A container according to claim 1, wherein the retention means keep the cover in the first opened position wherein the cover is pivoted at least 75° around the hinging axis.
- 4. A container according to claim 1, wherein the retention means comprise a first protrusion on the cover, the first protrusion being located near the hinging axis and a second protrusion provided on the lid, the first protrusion upon opening of the cover being rotatingly engageable with the second protrusion to prevent further opening of the cover.
  - 5. A container according to claim 4, wherein the

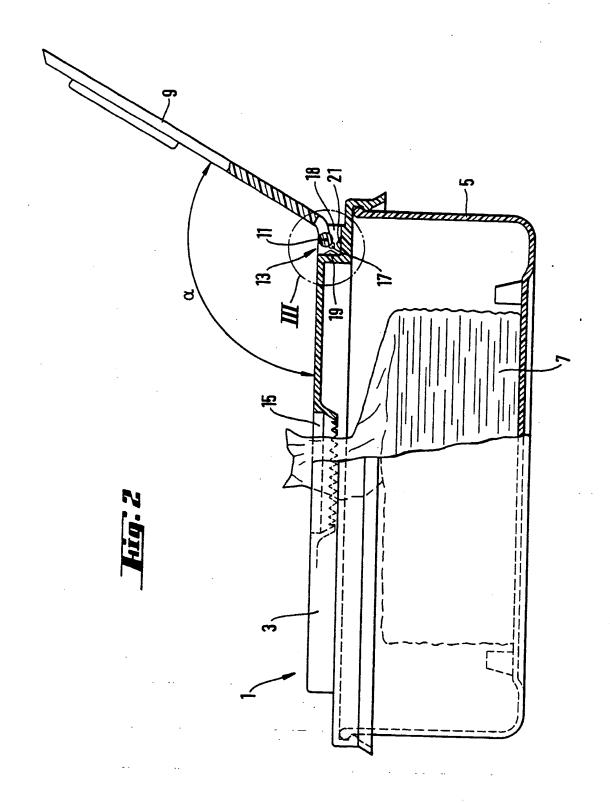
lid comprises a third protrusion located near the second protrusion such that a recess is defined between the second and third protrusion, into which recess the first protrusion can be rotatingly inserted, the third protrusion preventing the cover from closing after having been opened.

- 6. A container according to claim 5, wherein the second and third protrusion are formed of a single piece of material.
- 7. A container according to claim 1, wherein the lid comprises a first protrusion and the cover comprises a stopping surface or a second protrusion and a third protrusion located near the hinging axis, the stopping surface or the second and third protrusions being upon opening of the cover rotatingly engageable with the first protrusion on the lid to prevent further opening of the cover.
- 8. A container according to claims 4 or 7, wherein at least one protrusion comprises a sliding surface and an edge, which edge can be engaged with the sliding surface of an adjacent protrusion upon hinging of the cover around the hinging axis.
- 9. A container according to claim 1, wherein the force to hinge the cover from its closed position to its first open position is between 1 and 50 N.
- 10. A container according to claim 1, wherein the force to hinge the cover from its first open position to its second open position is at least 1 N.
- 11. A container according to claim 10, wherein said force is at least 5 N.

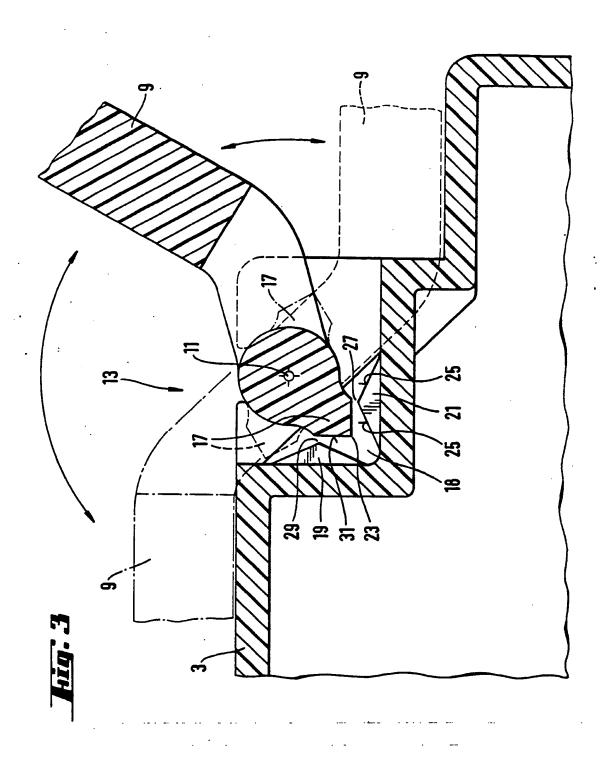
12. A container according to claim 11, wherein said force is at least 10  $\ensuremath{\text{N}}.$ 



A

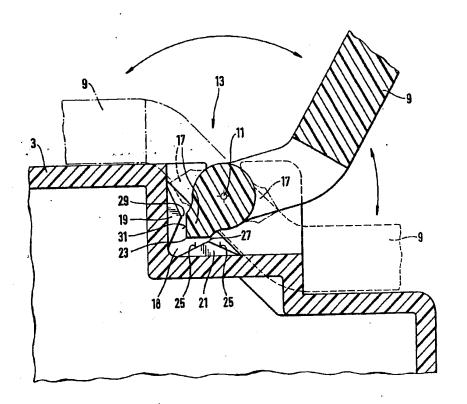


 $oldsymbol{A}_{i}$  ,



A

 $\boldsymbol{A}$ 



THIS PAGE BLANK (USPTO)

# This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

# BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked: □ BLACK BORDERS  $\square$  IMAGE CUT OFF AT TOP, BOTTOM OR SIDES ☐ FADED TEXT OR DRAWING ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING ☐ SKEWED/SLANTED IMAGES ☐ COLOR:OR BLACK AND WHITE PHOTOGRAPHS ☐ GRAY SCALE DOCUMENTS LINES OR MARKS ON ORIGINAL DOCUMENT ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY OTHER: \_\_\_

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

THIS PAGE BLANK (USPTO)